

Complying with GASB 34: How to value major capital assets

by Tom Maze, Transportation Sector Leader,
Howard R. Green Company; former director, Center
for Transportation Research and Education

Editor's note and correction: This is the second of a series of articles about changes in accounting requirements that will affect Iowa's state and local transportation agencies.

The Governmental Accounting Standards Board (GASB) sets Generally Accepted Accounting Practices (GAAP) for governmental agencies. In our first article, we said that Iowa does not require local governments to follow GAAP standards for annual financial reporting. Through conversations with the state Auditor's Office, we found out we were incorrect. Counties are required by Iowa law to follow GAAP standards for financial reporting; cities are encouraged, but not required, to follow GAAP standards.

Here's a brief summary of the first article: Issued in June 1999, GASB Statement No. 34 (or GASB 34) sets new GAAP requirements for reporting major capital assets, including infrastructure assets like roads, bridges, water and sewer facilities, etc. Under GASB 34, Iowa's governmental agencies must soon begin using accrual accounting methods for reporting such assets. This will be a major change for many Iowa agencies, which have traditionally used cash accounting reporting methods. Under cash accounting, physical assets appear on the books only during the year in which they are constructed; in subsequent years, they are off the books. Accrual accounting requires that the costs of long-lived assets be charged over the life of those assets.

The first article also discussed the schedule for complying with the new reporting requirements. Find the complete article online at www.ctre.iastate.edu/pubs/Tech_News/2000/index.htm.



GASB 34 is documented in a small paperback booklet, which is devoted primarily to guidelines for developing financial statements and examples of such statements. The booklet defines capital assets, one class of which is infrastructure assets. The guidelines specifically identify roads, bridges, sewers, drainage systems, and other infrastructure commonly operated by local governments as capital assets.

According to GASB 34, each jurisdiction can use one of two general methods for valuing existing infrastructure assets: depreciation, or the modified approach. Whichever method is used, a fundamental requirement is a good inventory of assets. The inventory will include the historical cost, or estimated historical cost, of construction.

Depreciation method of valuing assets

The easiest method for valuing assets under GASB 34 is depreciation. Governments can use any reasonable and established method to depreciate an asset's value over its useful life until it reaches salvage value. On each year's financial statement, depreciation will be shown as an expense, and the capitalized value of the asset declines each year by the amount of the annual depreciation.

One simple method for determining depreciation is straight-line depreciation. The annual amount of straight-line depreciation is determined by the following equation:

$$\text{annual depreciation} = (\text{historical cost} - \text{salvage value}) / \text{useful life in years}$$

This fairly straightforward method for valuing assets is commonly used by local governments to value rolling stock and other assets. However, this and other depreciation formulae for valuing assets may not be the best way to value infrastructure assets because it omits one critical variable: maintenance.

The life (and value) of a road or bridge largely depends on how well it is maintained. Regular maintenance adds value to infrastructure assets. For this reason, some agencies that have gotten a head start on valuing their existing capital assets have chosen not to use depreciation methods.

The alternative approach to valuing existing assets suggested by GASB 34 is called the "modified approach."

Modified approach to valuing assets

The modified approach to valuing capital assets incorporates the benefits, or value, of maintenance activities into the reporting process. GASB 34 does not provide a complete description of such an approach but does describe the minimum required inputs and outputs. In general, they include the following:

"The modified approach to valuing capital assets incorporates the benefits, or value, of maintenance activities into the reporting process."

- Maintain an up-to-date inventory of infrastructure assets.
- Regularly assess the condition of all infrastructure assets and summarize the results, using a measurement scale.
- Each year, estimate the annual cost required to maintain and preserve the assets at a minimum condition level established by the agency. The minimum condition level should be expressed in terms of categories or a condition index (e.g., good, fair, and poor).

According to GASB 34, the assessment of infrastructure conditions must be conducted at least once every three years. In addition, the results of the three most recent condition assessments must provide reasonable assurance that the assets are being preserved approximately at or above the minimum condition level established by the agency.

The mechanics of implementing the modified approach are left to the agency to determine.

Determining the current value of infrastructure assets

Under the depreciation method for valuing assets, deriving a current value is fairly straightforward. However, under the modified approach, deriving a current value for infrastructure assets will be one of the most problematic requirements for city public works officials and county engineers. And it is also the one for which the least guidance is available.

The GASB 34 booklet’s discussion about valuing capital assets is rather brief and leaves a good deal of flexibility to engineers and other infrastructure managers. When addressing methods for estimating the value of capital assets, the text uses words like “professional judgment,” “reasonable,” and “consistent.” In other words, rather than prescribing rigid formulae for valuing assets, GASB 34 allows managers to estimate asset values through consistent and reasonable methods.

We would suggest that estimating the current value of an asset under the modified approach be based on reasonable and consistent methods for determining the current condition of the asset. A

relatively simplistic approach would be to rate assets (for example, roadways) on a condition scale from 0 to 100, where 100 is perfect, 0 is impassable, and 40 is considered the minimum acceptable level of condition (terminal condition). This would mean that a road could lose a maximum of 60 condition points in its life. Under this approach, a road currently rated at 70 (half the maximum point loss) would be valued at half the historical cost.

Because of the many variables to be considered, we’re not suggesting that anyone follow this method for valuing assets, only that it illustrates one possible approach.

What’s next?

GASB 34 describes the required inputs and outputs of the modified approach in terms of an “asset management system.” In the next issue of *Technology News*, we’ll discuss how the elements of the modified approach can form the basis of a full-fledged asset management system for local agencies’ various capital assets.

In the next issue we will also provide details about GASB 34 training to be offered this summer by the Iowa State Association of Counties and the Iowa League of Cities. The first session will focus on the needs of local government financial officers. In all likelihood, there will be a follow-up session for engineers and public works professionals. •

“Under the modified approach, deriving a current value for infrastructure assets will be one of the most problematic requirements”

Including the value of existing roads and bridges in financial reports will be a major change for many Iowa agencies under GASB 34.

